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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,595	03/15/2004	Ichiro Okumura	00862.017963	8272
5514	7590	11/23/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			DOUGHERTY, THOMAS M	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	

2834

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/799,595

Applicant(s)

OKUMURA ET AL.

Examiner

Thomas M. Dougherty

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 5 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 304.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Assard et al. (US 4,523,120). Assard et al. show (figs. 1-5) a manipulator comprising: a manipulation target object manipulating member (18) being driven and controlled by a plurality of free rotation axes (x, y); all the plurality of free rotation axes crossing at one point; and a manipulation distal end portion of said manipulating member being placed near the intersection.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Takeshi (JP 11-090867). Takeshi shows (fig. 7) a manipulator comprising: a manipulation target object manipulating member (14) being driven and controlled by a plurality of free rotation axes (6 degrees of freedom); all the plurality of free rotation axes crossing at one point; and a manipulation distal end portion (14) of said manipulating member being placed near the intersection.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al. (WO 00/30186). Anderson et al. show (figs. 6, 9) a manipulator comprising: a manipulation target object manipulating member (18) being driven and controlled by a plurality of free rotation axes (1-3); all the plurality of free rotation axes crossing at one

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point (see fig. 9); and a manipulation distal end portion of said manipulating member being placed near (at 4) the intersection.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by (JP 11-220891). JP shows (figs. 21, 25, 26) a manipulator comprising: a manipulation target object manipulating member (408a) being driven and controlled by a plurality of free rotation axes (see fig. 21); all the plurality of free rotation axes crossing at one point; and a manipulation distal end portion of said manipulating member being placed near the intersection.

Wherein said manipulating member (408a) is integrally mounted on a spherical shell movable member (406), the manipulation distal end portion of said manipulating member is placed near the center of the spherical shell movable member (406), the spherical shell movable member (406) is in contact with a vibration member (401-405) which can vibrate, and rotation of the spherical shell movable member (406) around the center thereof is controlled by controlling vibration of the vibration member (401-405) thereby controlling a posture of said manipulating member (408a).

### ***Allowable Subject Matter***

Claims 4 and 5 are allowed.

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: the prior art fails to show or fairly suggest a minute object manipulating apparatus comprising: a manipulator comprising a manipulation target object manipulating member being driven and controlled by a plurality of free rotation axes, all the plurality of free rotation axes crossing at one point, and a manipulation distal end portion of said manipulating member being placed near the intersection; a magnifying observation device for magnifying observation of the manipulation target object and the manipulation distal end portion of said manipulating member; and a remote controller for remotely controlling said manipulator.

The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to show or fairly suggest the manipulator rejected under USC 102 as cited above, but further comprising: first rotating means for rotating a first rotating shaft on which a first arm is mounted; second rotating means for rotating a second rotating shaft which is mounted on the first arm and on which a second arm is mounted; and third rotating means for rotating a third rotating shaft which is mounted on the second arm and on which a third arm is mounted, wherein said manipulating member is mounted on the third rotating shaft, and said first, second, and third rotating shafts pass through a manipulation distal end portion of said manipulating member.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The remaining prior art cited reads on some aspects of the claimed invention.

Direct inquiry to Examiner Dougherty at (571) 272-2022.

*tmd*  
tmd

November 21, 2005

  
TOM DOUGHERTY  
PRIMARY EXAMINER